

List of Claims

Claims 1 - 20 (Cancelled)

Claims 21 - 38 (New)

21. (New) Slips comprising:

- (a) a slips bowl seatable in a table;
- (b) a plurality of tubular-gripping slips disposed in the slip bowl for radial movement therein;
- (c) moving means for moving the slips radially whereby the moving means moves the slips into or out of contact of a tubular located within said bowl at substantially ninety degrees to the tubular;
- (d) said slips including a sloping external surface and in which said moving means comprises a wedge which contacts said sloping surface of the slips thereby moving said wedge over the said sloping surface causing radial movement of the slips; and
- (e) wedge moving means for applying a force to said wedge to move said wedge over said surface of the slips.

22. (New) The slips as claimed in Claim 21 in which there are a plurality of wedges between said wedge moving means and said slips with a first wedge in contact with said sloping surface of the slips and an adjacent wedge in contact with said first wedge.

23. (New) The slips as claimed in Claim 21 in which there are two wedges with the first wedge in contact with said sloping surface of the slips and an adjacent wedge in contact with said first wedge and said wedge moving means, and in which said first wedge is a coarse wedge and the second wedge is a fine wedge.

24. (New) The slips as claimed in Claim 22 including a spring located between said first and adjacent wedges.

25. (New) The slips as claimed in Claim 22 including ridges on said coarse wedge such that said sloping surface is at an angle greater than about 10 degrees with respect to the axis of said tubular.

26. (New) The slips of Claim 21 in which said moving means comprises first and second actuating links pivotally connected to each other.

27. (New) The slips of Claim 21 wherein said means for applying a force to said wedge is selected from the group comprising hydraulic, mechanical or electrical motors.

28. (New) The slips of Claim 21 wherein said means for applying a force to said wedge comprises hydraulic motor means.

29. (New) The slips of Claim 21 including spring means positioned between said wedge moving means and said wedge.

30. (New) The slips of Claim 21 adapted to engage a tubular having a tool joint including second slip means of a size and shape for engaging said tool joint to provide failsafe support of the tubular.

31. (New) The slips of Claim 21 wherein said slips include a stepped surface.

32. (New) The slips of Claim 21 including bearing means for rotating said wedge about a vertical axis.

33. (New) The slips of Claim 21 wherein said bowl has a conical surface portion.

34. (New) The slips as claimed in Claim 21 adapted to engage a tubular wherein said slips have surfaces for contacting and securing said tubular, and wherein said surfaces are non-ridged

smooth surfaces for engaging and securing said tubulars without damaging the outer surface of said tubular.

35. (New) Slips comprising:

- (a) a slips bowl;
- (b) a plurality of tubular-gripping slips disposed in said slip bowl for radial movement therein; and
- (c) moving means for moving said slips in a substantially purely radial motion whereby said slips do not damage said tubular in engaging and vertically securing said tubular.

36. (New) The slips as claimed in Claim 35 including a sloping external surface on said slips and in which said moving means includes wedge means, which contact said sloping surface, for moving said slips in a substantially purely horizontal plane.

37. (New) Slips for engaging and securing tubulars having tool joint portions comprising:

- (a) a first set of slips;
- (b) means for moving said first set of slips into engagement with said tubulars at positions away from said tool joint portions;
- (c) a second set of failsafe slips; and

(d) means for moving said failsafe slips into engagement with said tool joint portions for positively locking said tubulars against vertical movement.

38. (New) The slips of Claim 37 wherein said means for moving said first and second sets of slips comprise single motor means.